

Figure 1

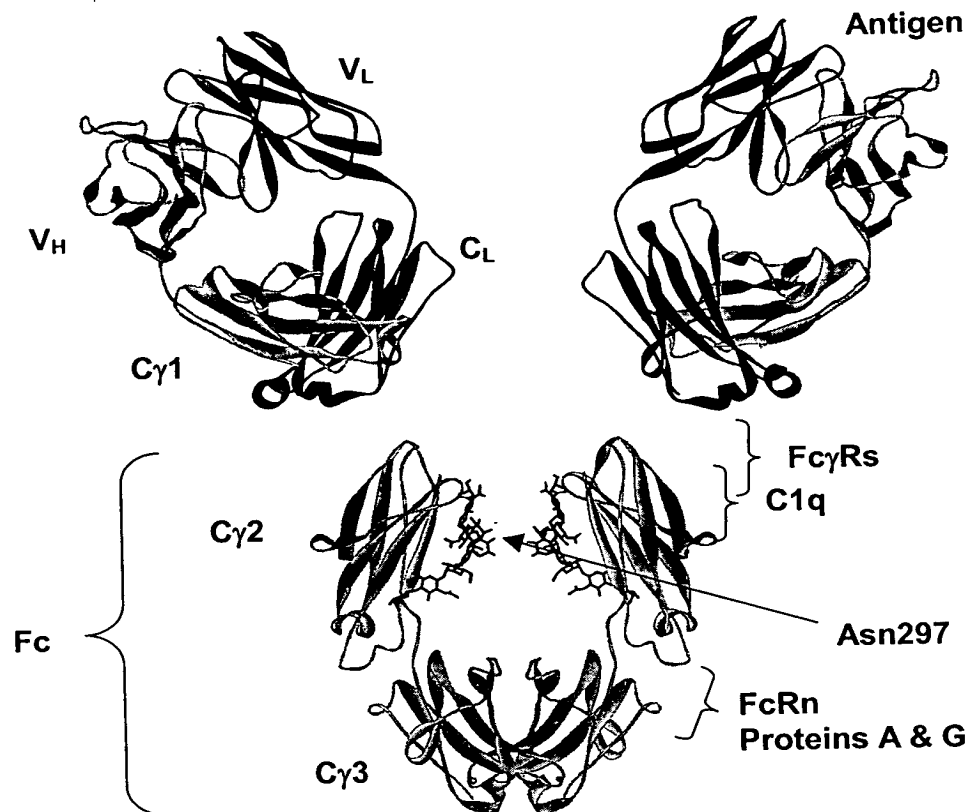
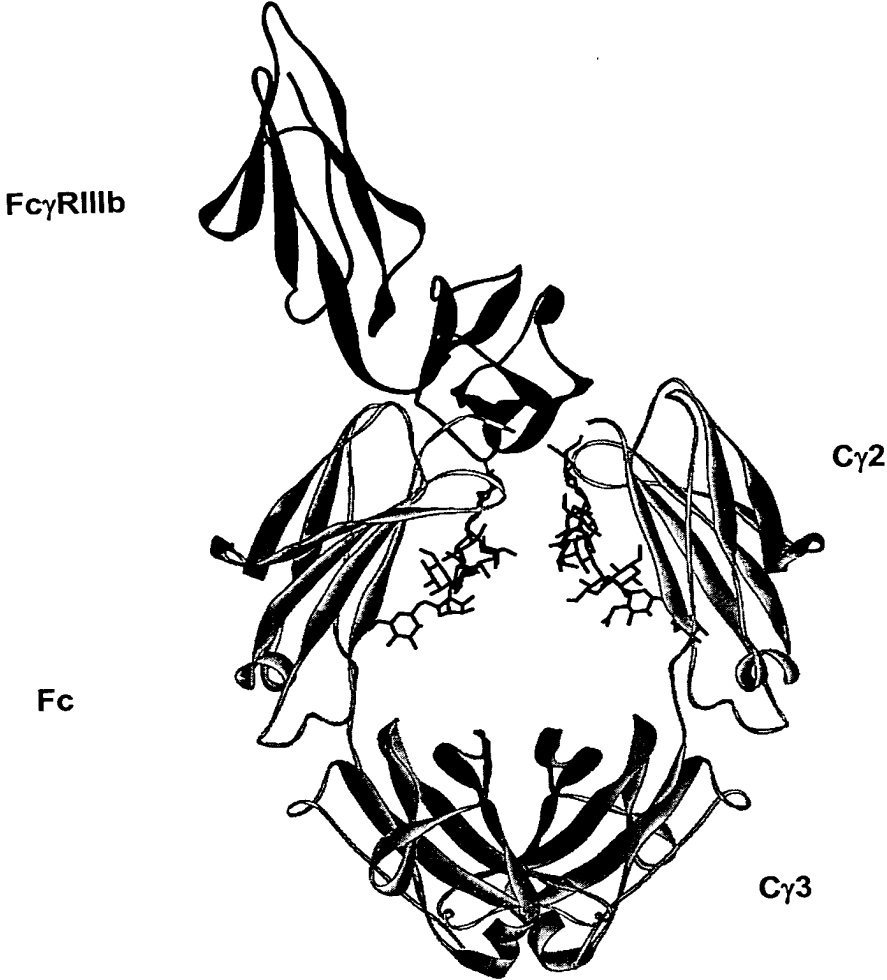


Figure 2



100 200 300 400 500 600 700 800 900 1000
101 102 103 104 105 106 107 108 109 110
111 112 113 114 115 116 117 118 119 120
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141 142 143 144 145 146 147 148 149 150
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Figure 3

VH1->
1 10 20 30 40 50 60
123456789012345678901234567890123456789012345678901234567890
QVQLQESGPGLVPRPSQTLSTCTVSGFTFTDFYMNWVRQPPGRGLEWIGFIRDKAKGYTT
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123456789012345678901234567890123456789012345678901234567890
EYNPSVKGRVTMLVDTSKNQFSLRLSSVTAADTAVYYCAREGHTAAPFDYWGQGSLVTVS
Cy1->
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123456789012345678901234567890123456789012345678901234567890
SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQS
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190 200 210 220 230 240
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SGLYSLSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLG
1234567890123456
KABAT 22 23
Cy2->
250 260 270 280 290 300
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GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQY
789012345678901234567890123456789012345678901234567890123456
240 250 260 270 280 290
?Cy3?->
310 320 330 340 350 360
123456789012345678901234567890123456789012345678901234567890
NSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRD
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300 310 320 330 340 350
370 380 390 400 410 420
123456789012345678901234567890123456789012345678901234567890
ELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR
789012345678901234567890123456789012345678901234567890123456
360 370 380 390 400 410
430 440 450
1234567890123456789012345678901
WQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
7890123456789012345678901234567
420 430 440

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Figure 4

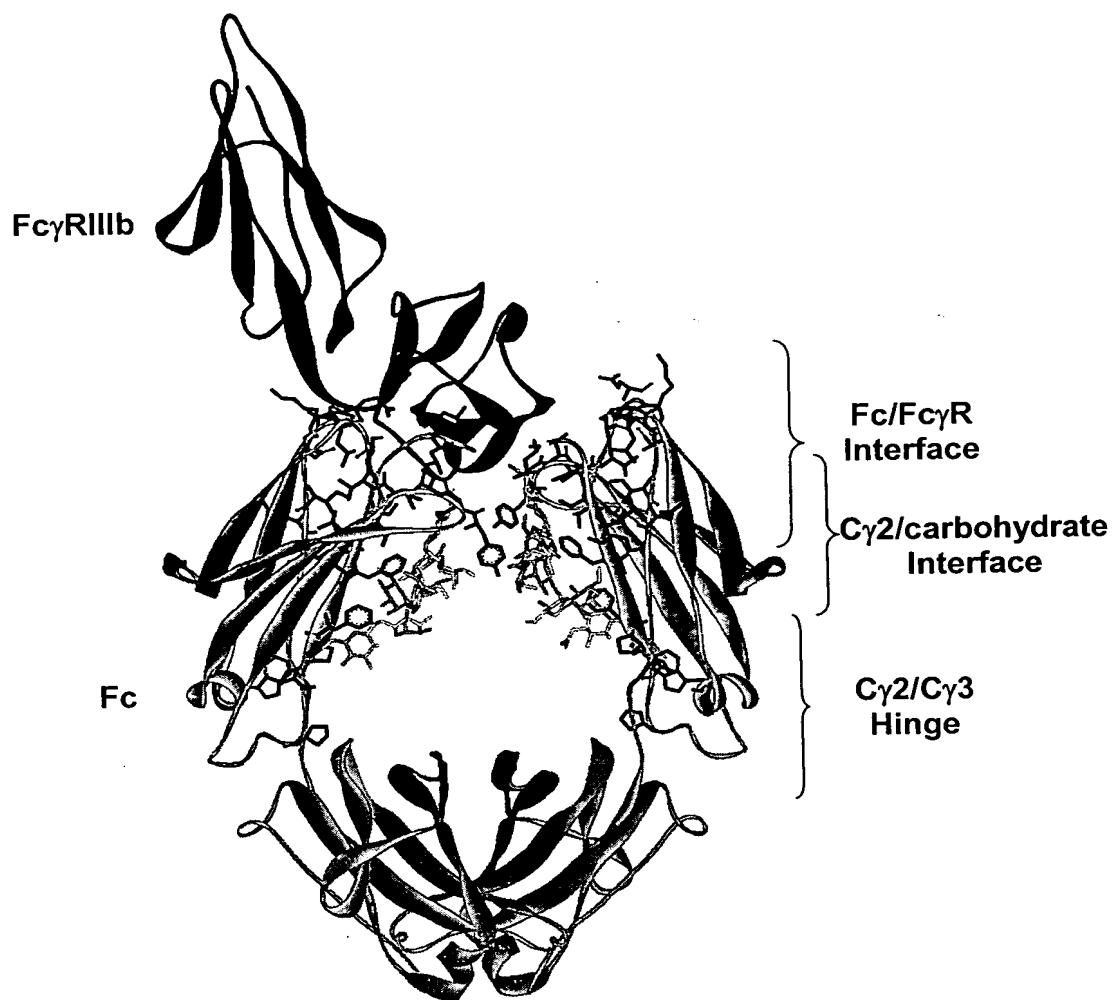


Figure 5

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29 30 31 32 33 34
123456789012345678901234567890123456789012345678901234567890
GVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK

35 36 37 38 39 40
123456789012345678901234567890123456789012345678901234567890
GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD

41 42 43 44
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Figure 6

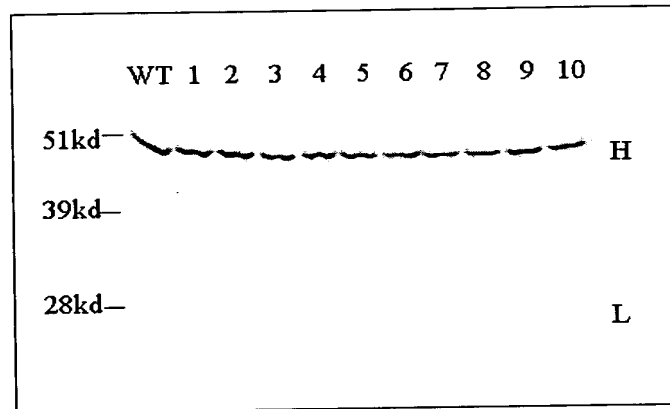


Figure 7

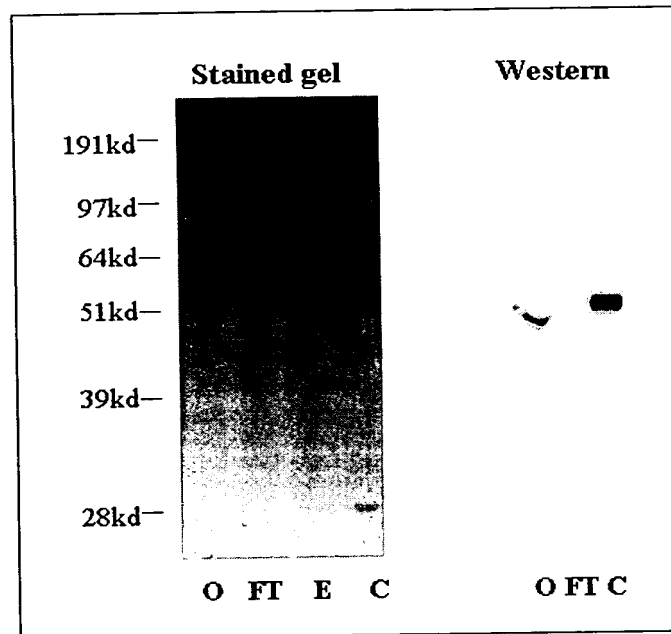


Figure 8

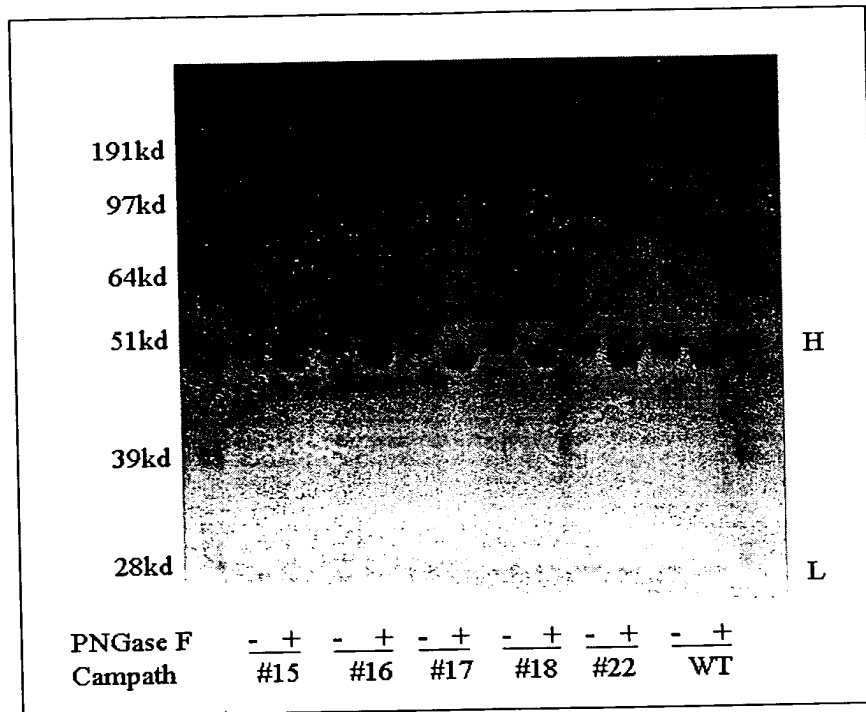


Figure 9

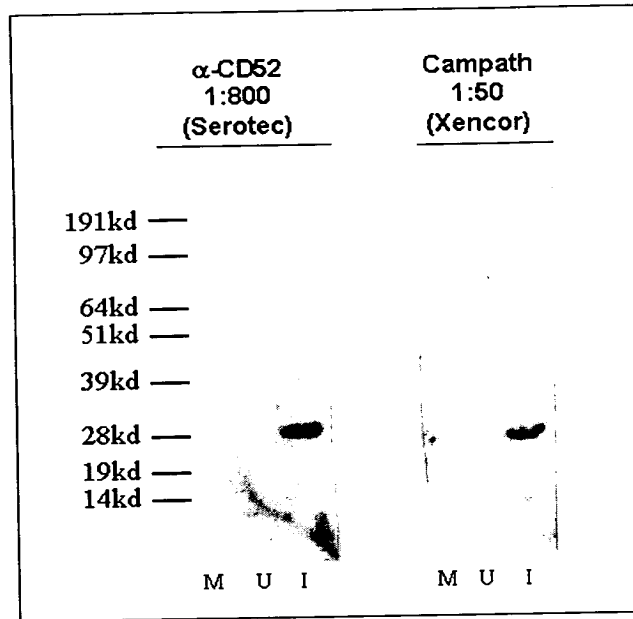


Figure 10

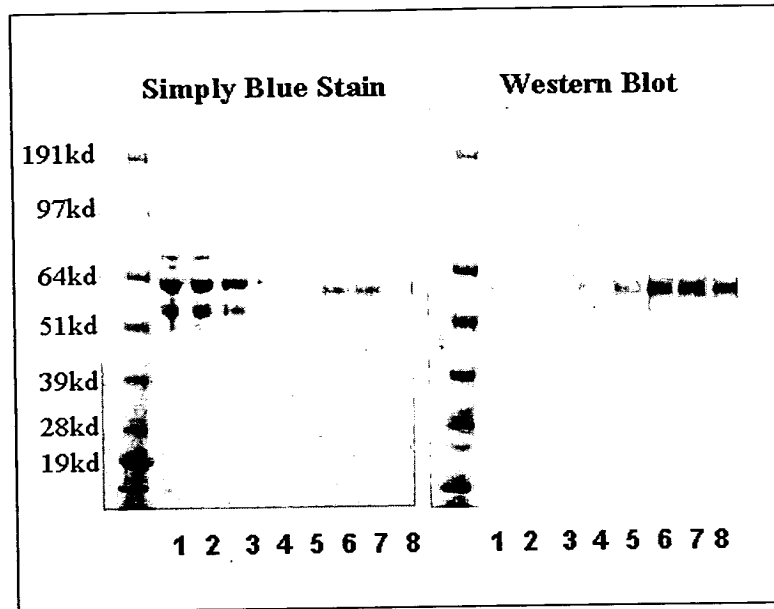


Figure 11

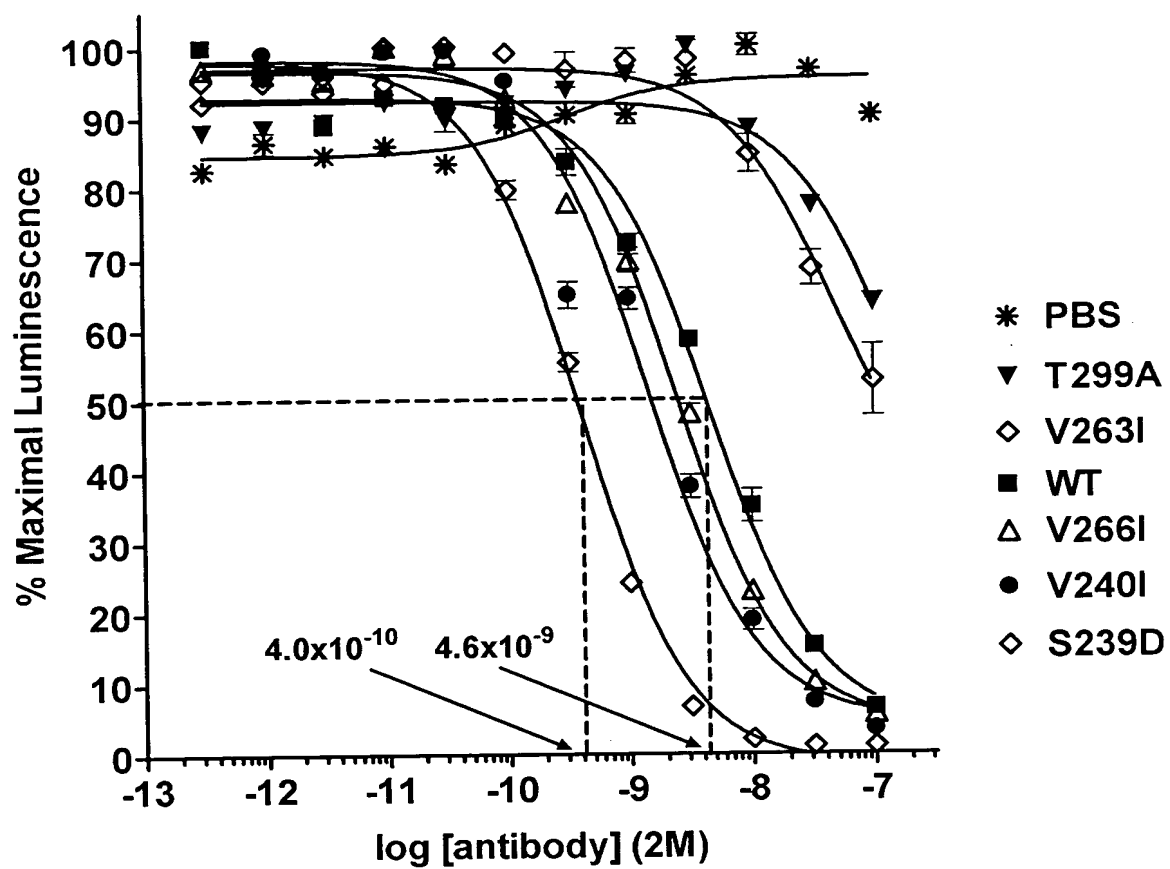


Figure 12

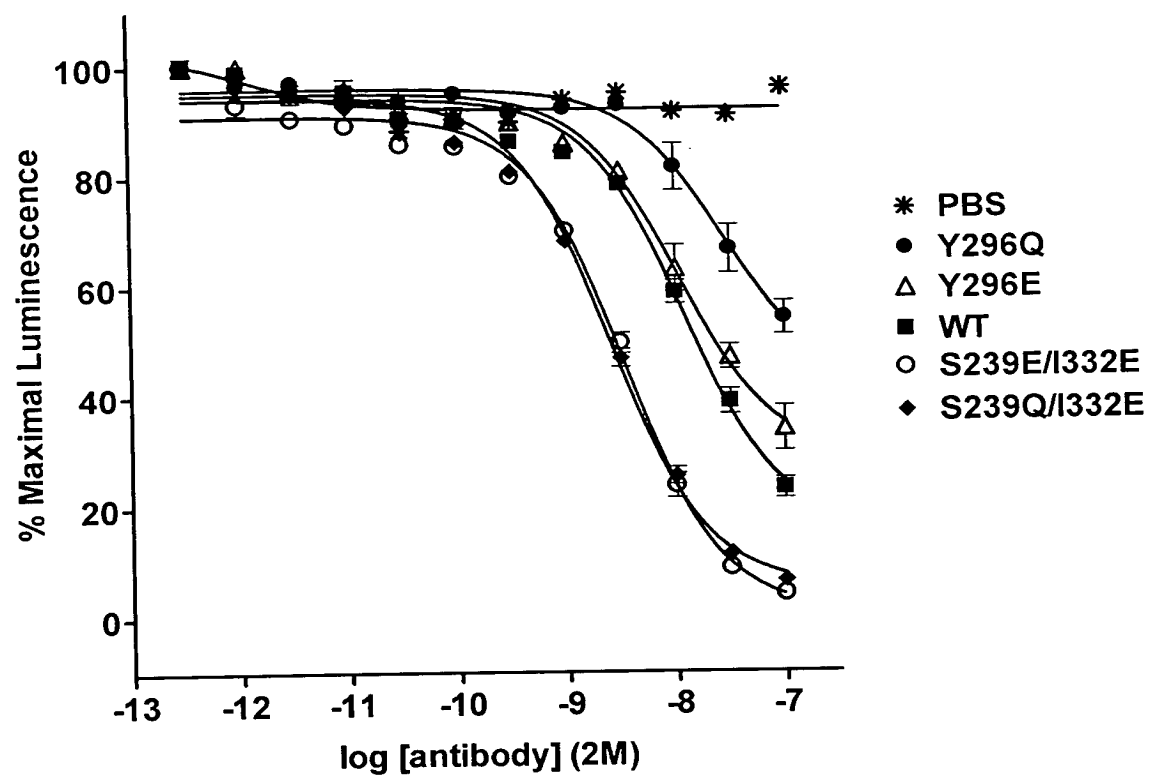


Figure 13

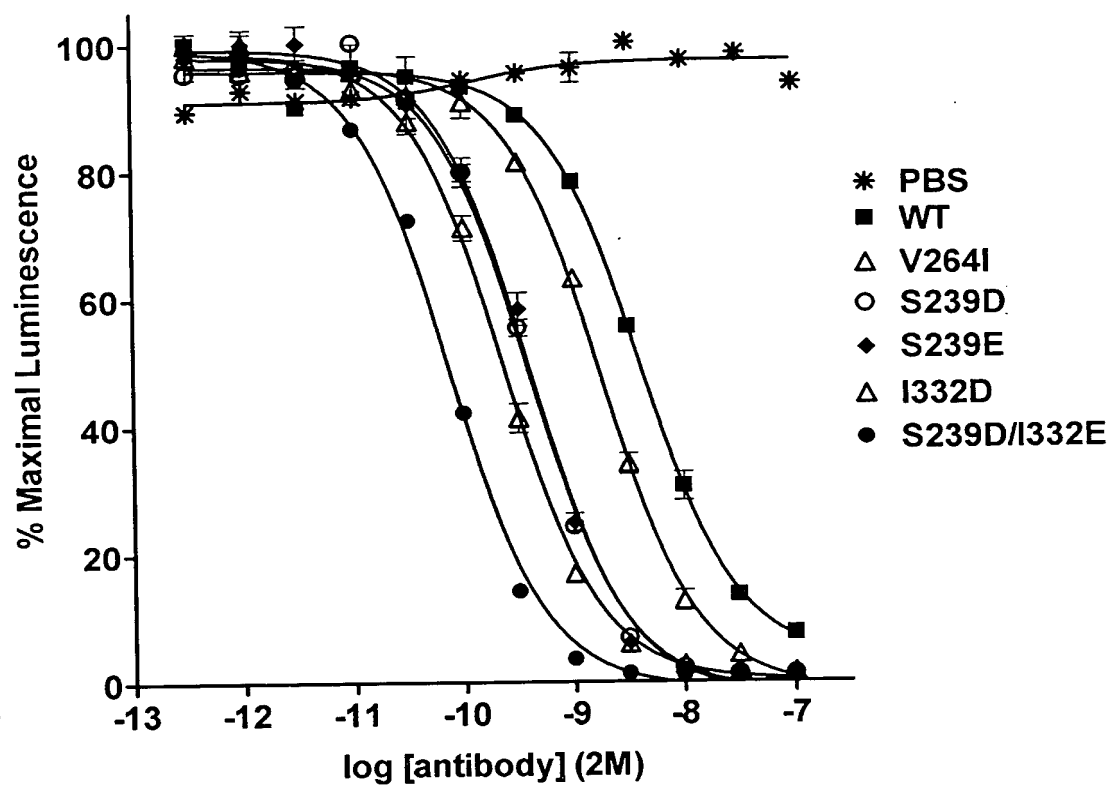


Figure 14

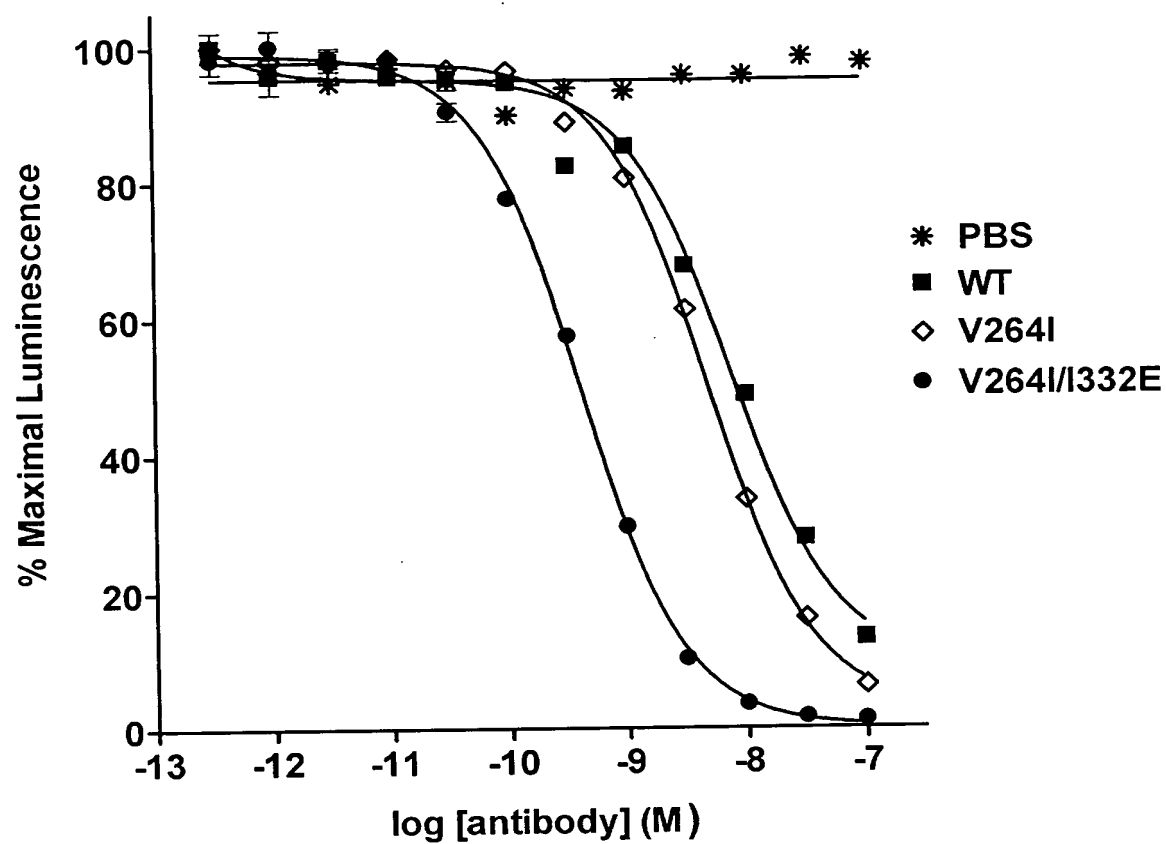


Figure 15

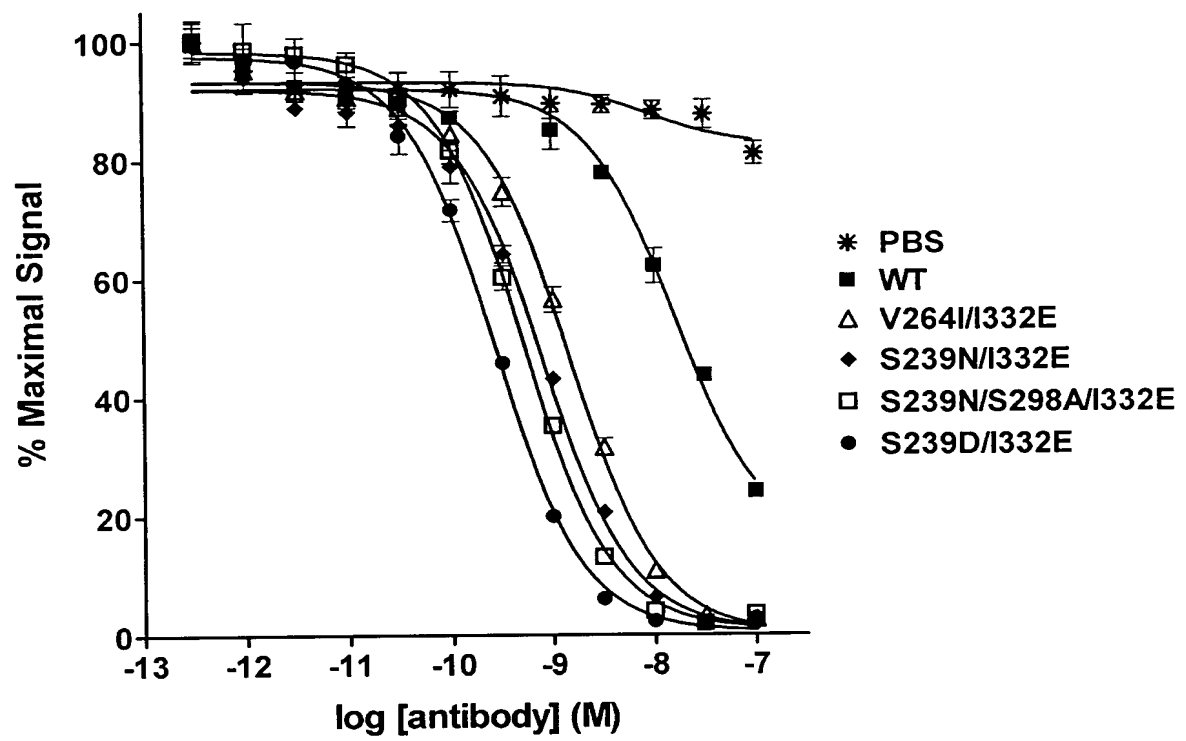


Figure 16a

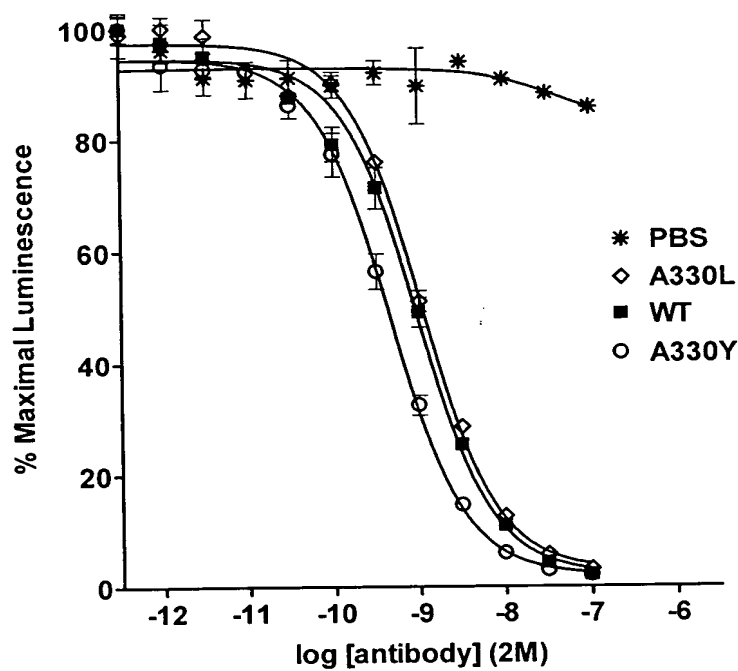


Figure 16b

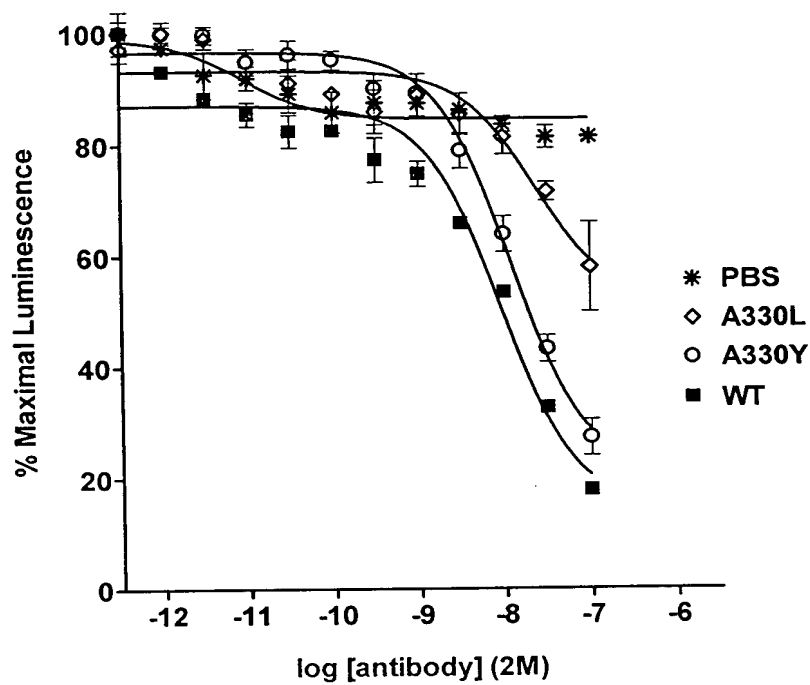


Figure 17

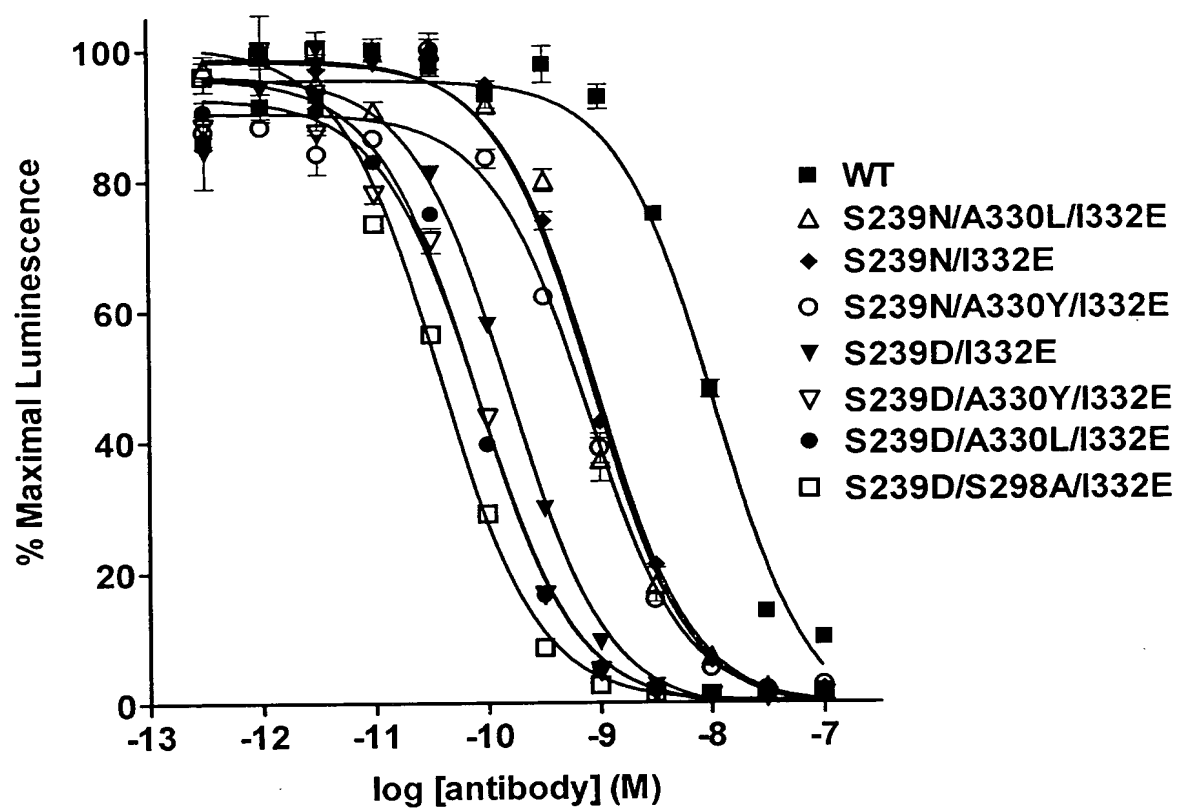


Figure 18

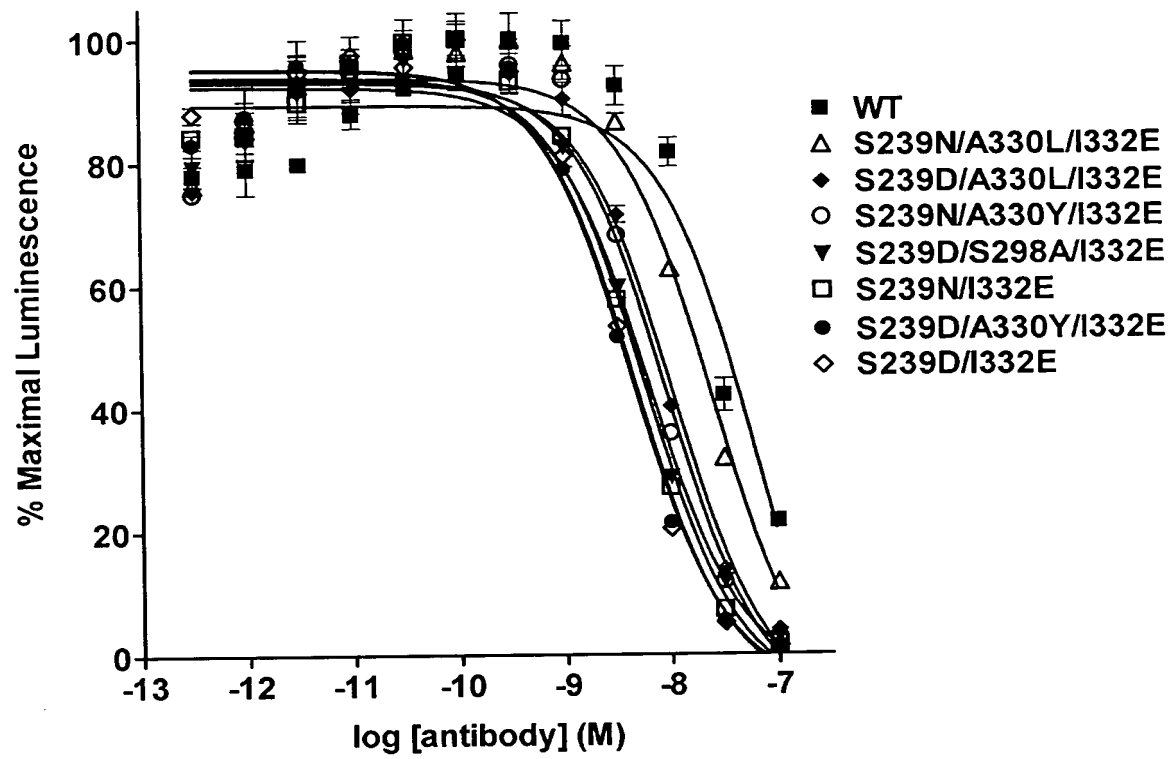


Figure 19a

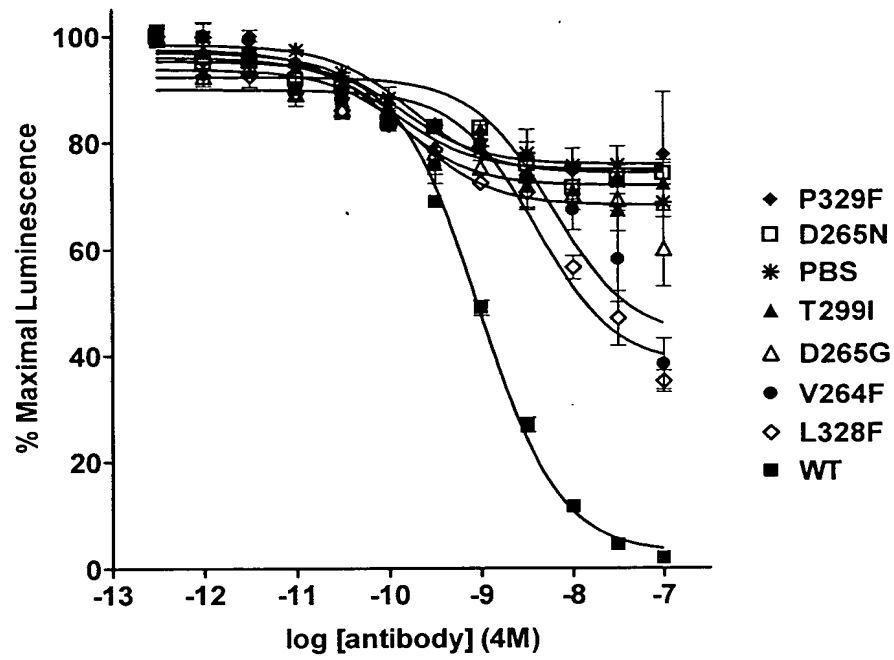


Figure 19b

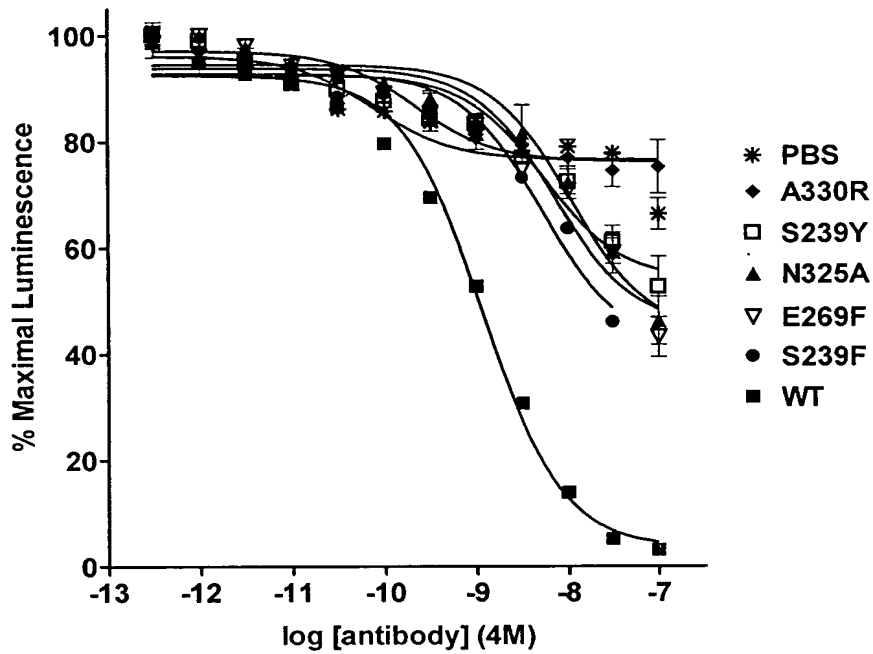


Figure 20

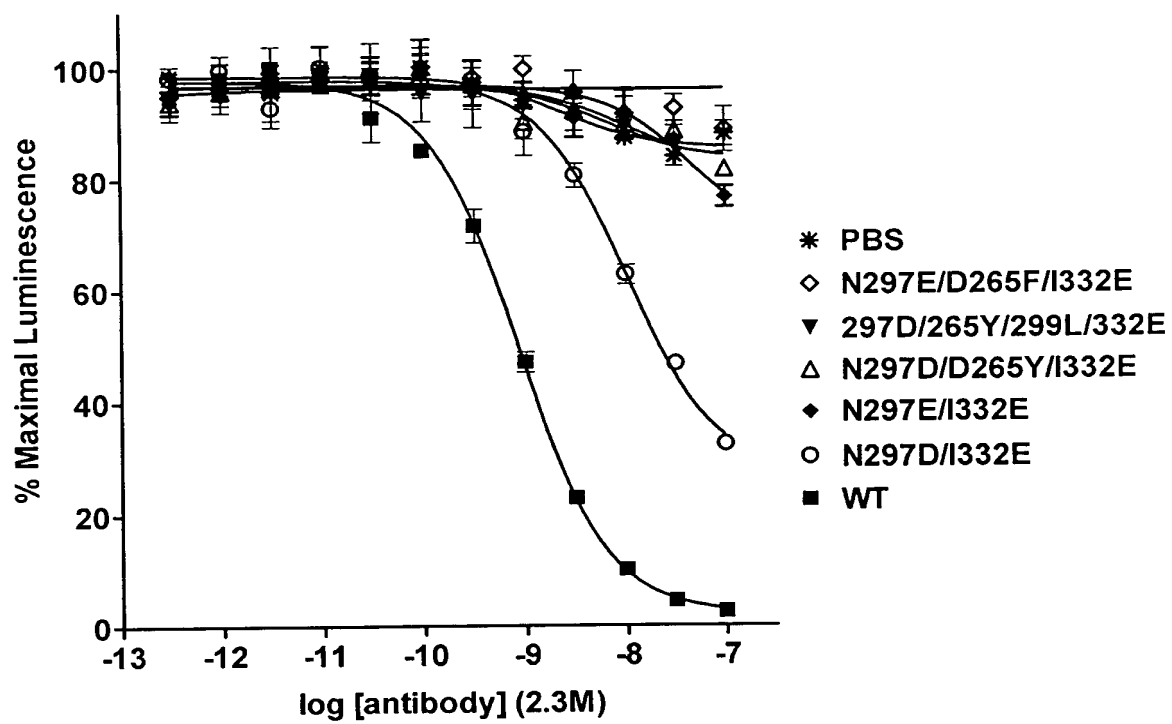


Figure 21

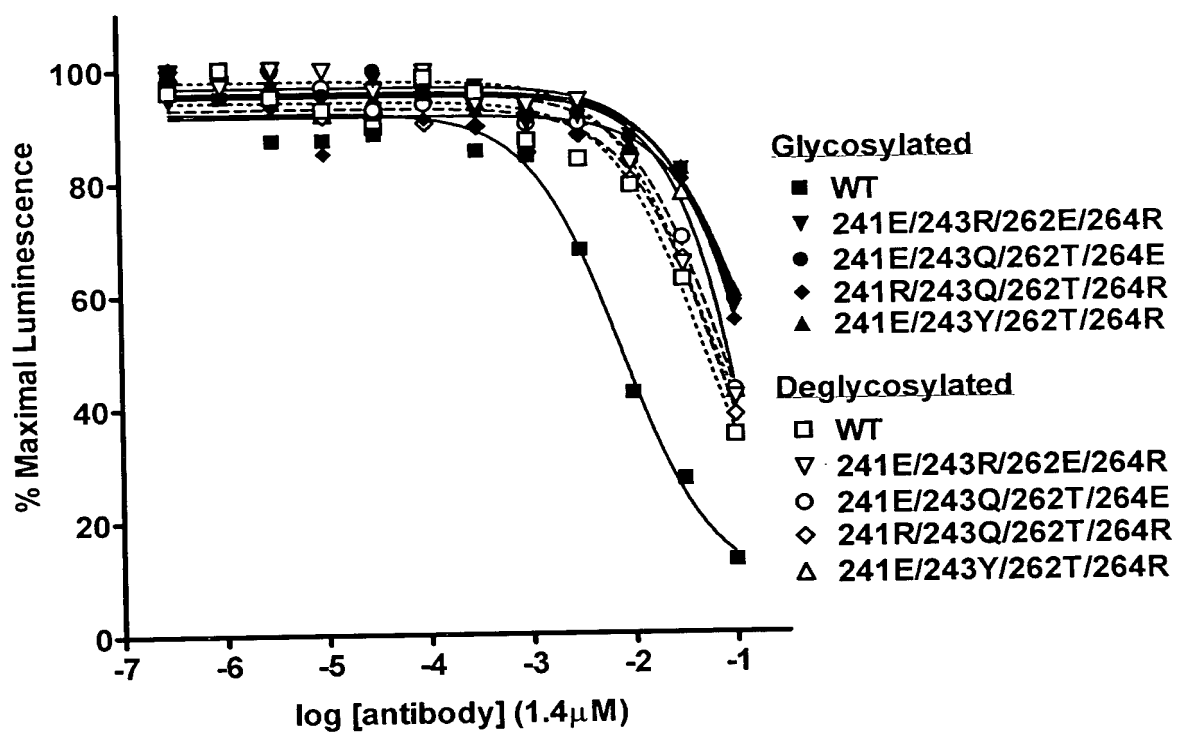


Figure 22a

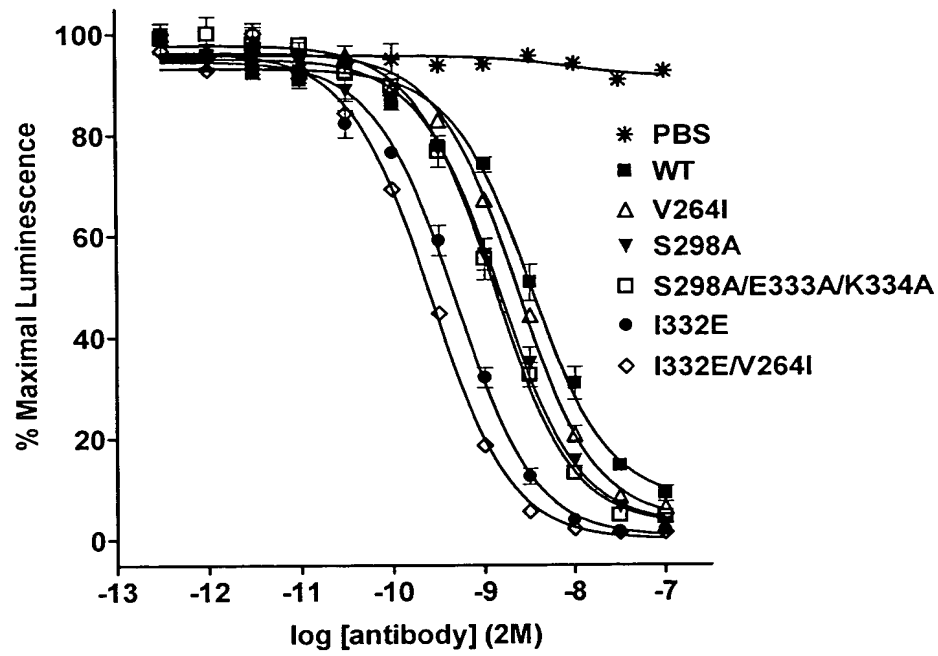


Figure 22b

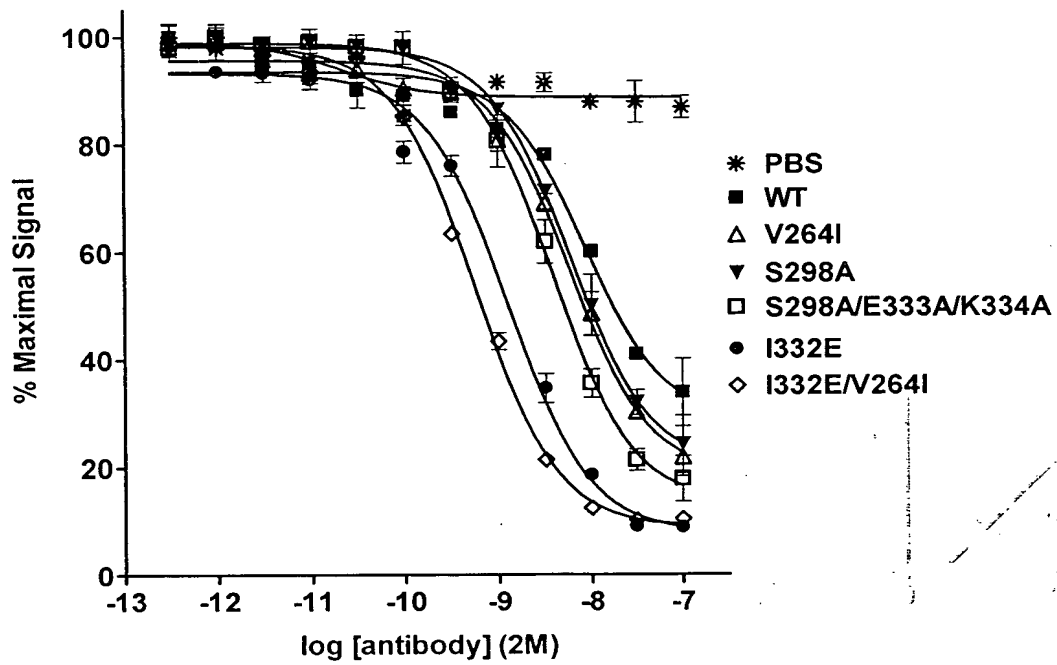


Figure 23a

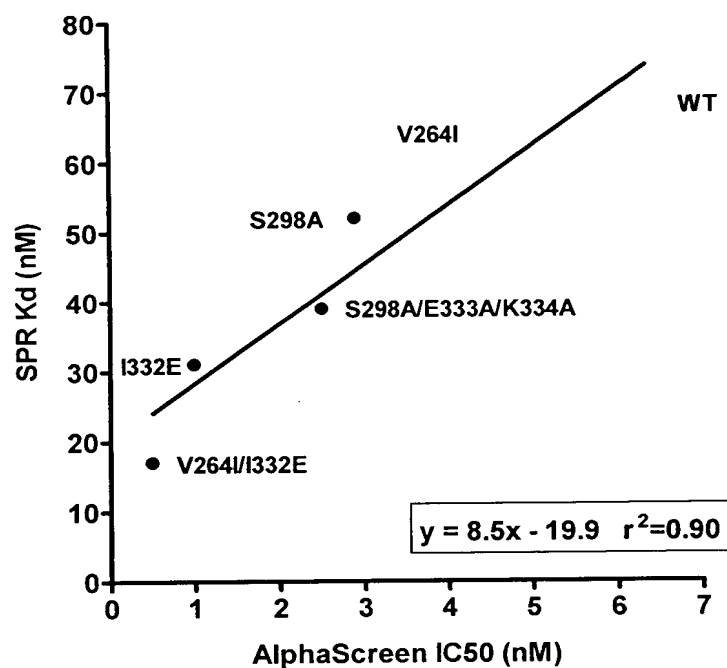


Figure 23b

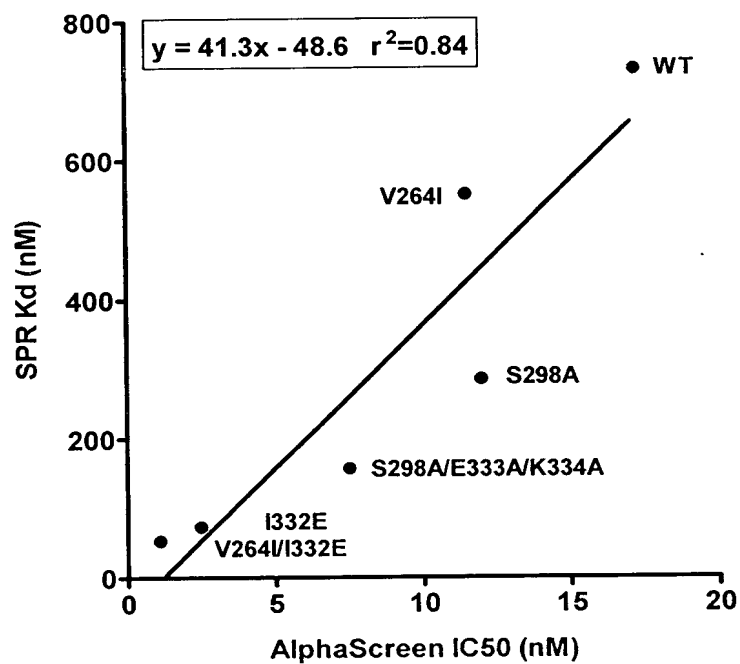


Figure 23c

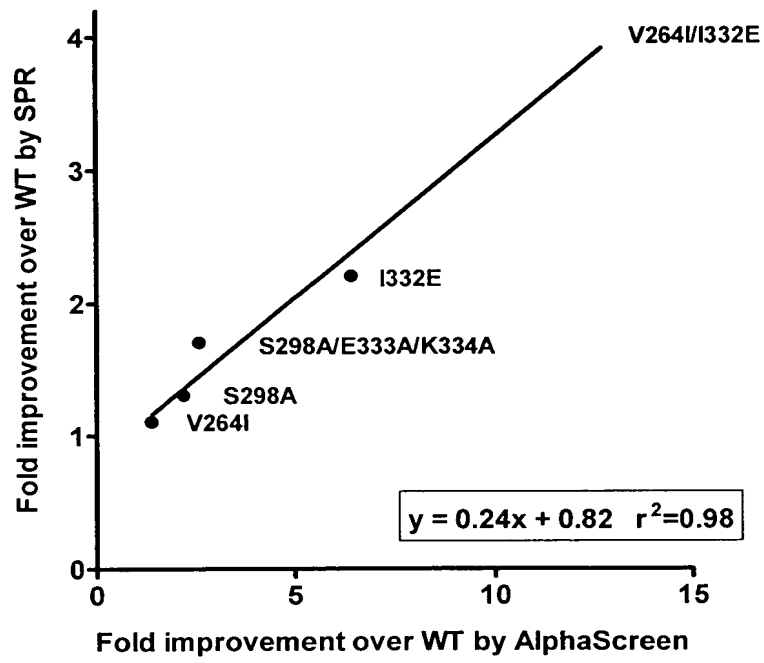


Figure 23d

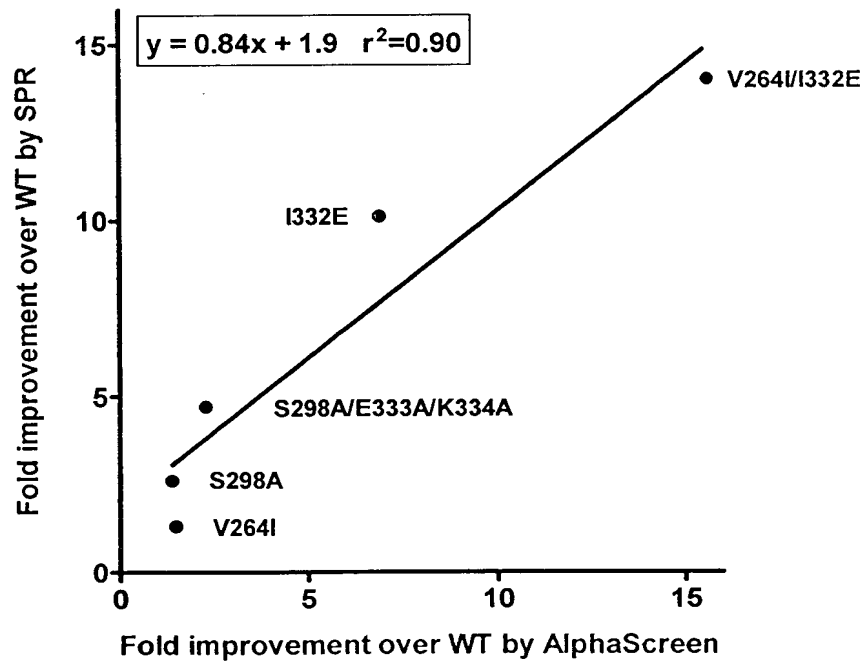


Figure 24a

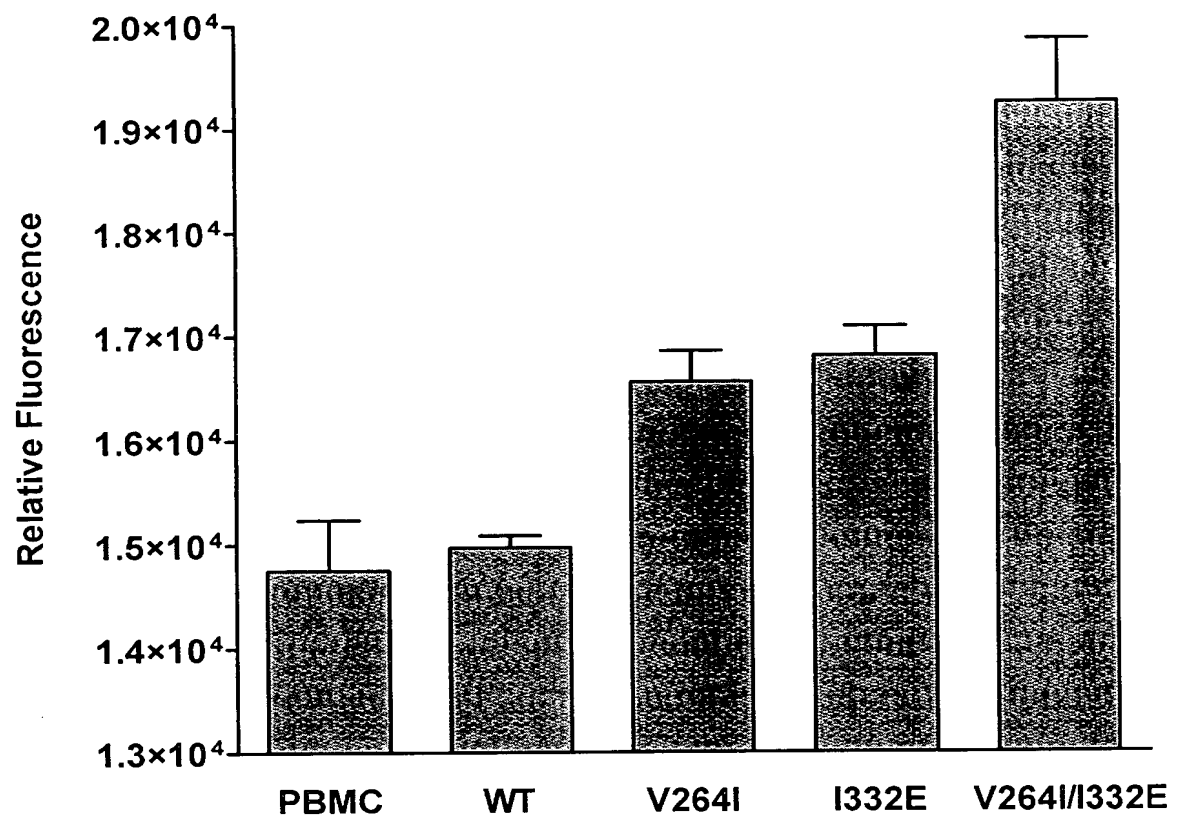


Figure 24b

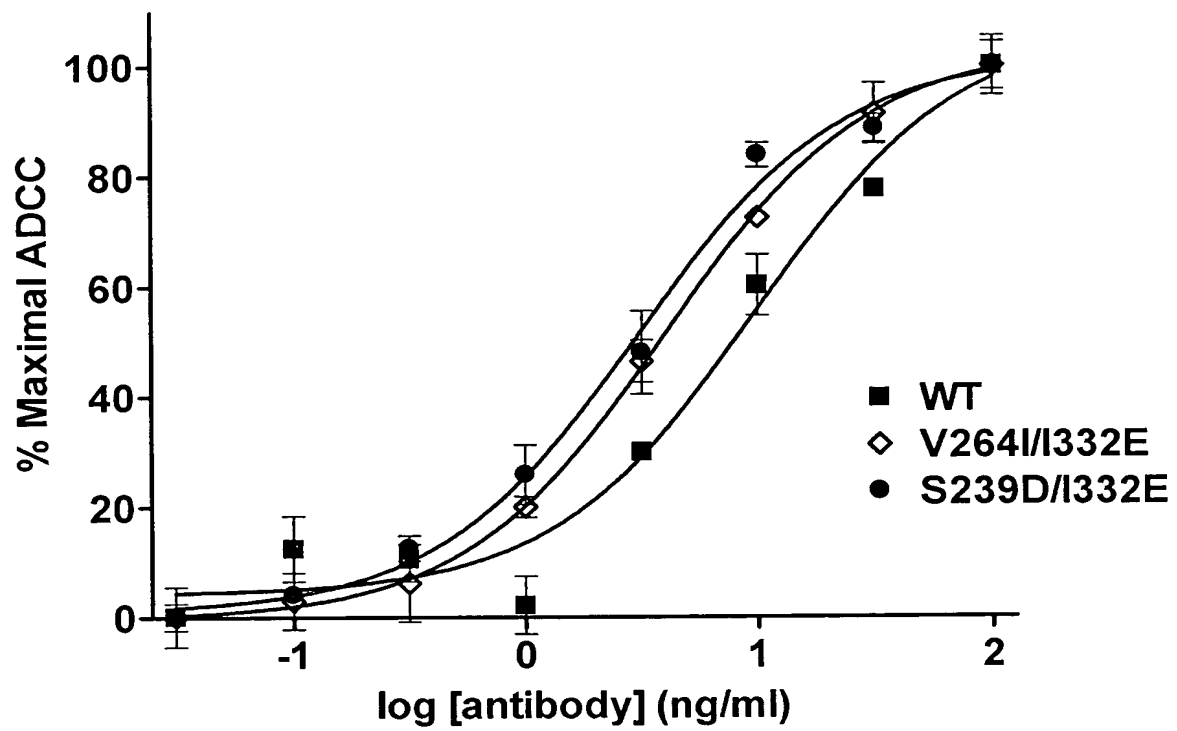


Figure 25a

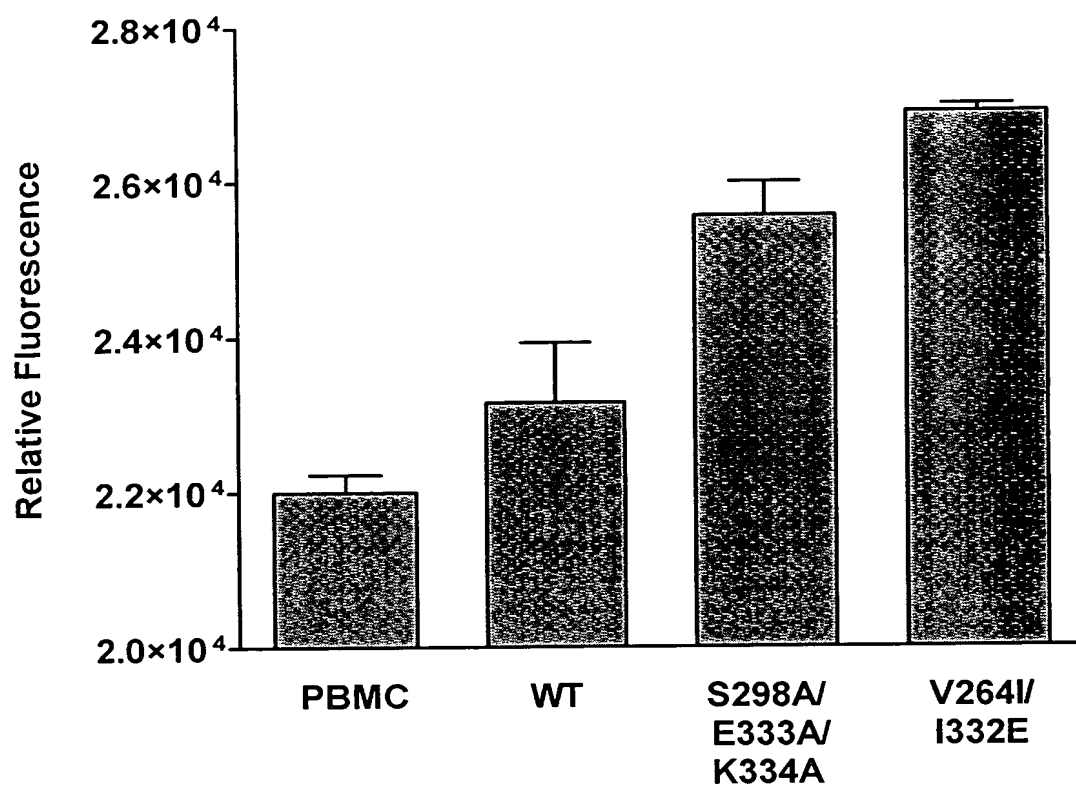


Figure 25b

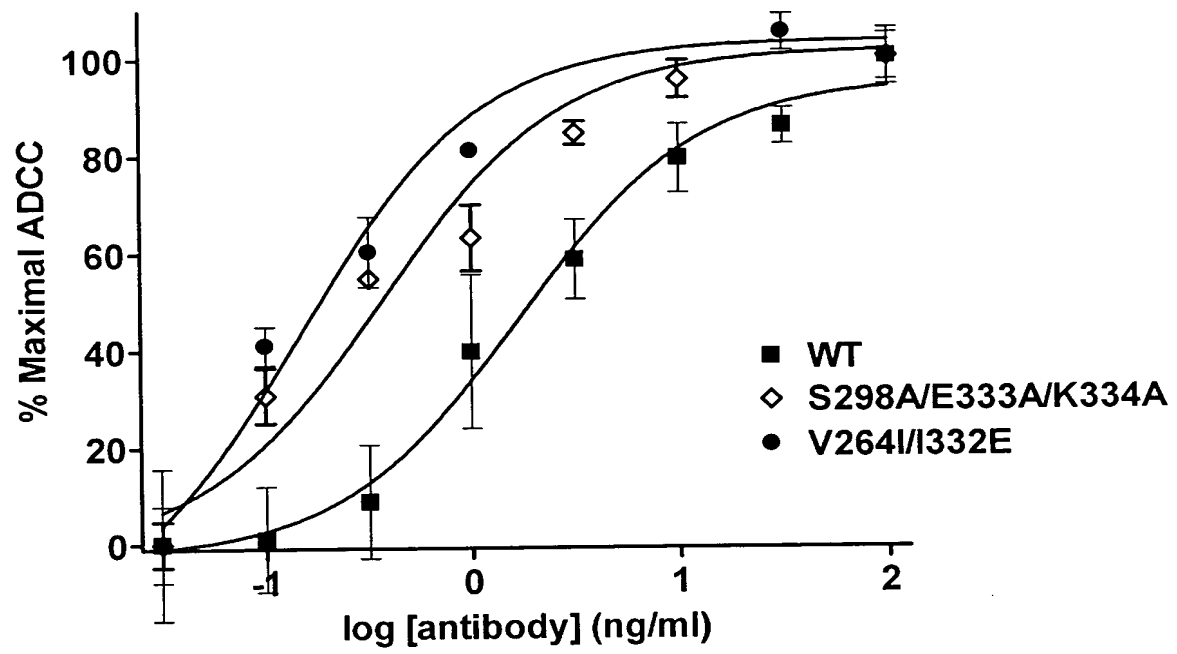


Figure 26a

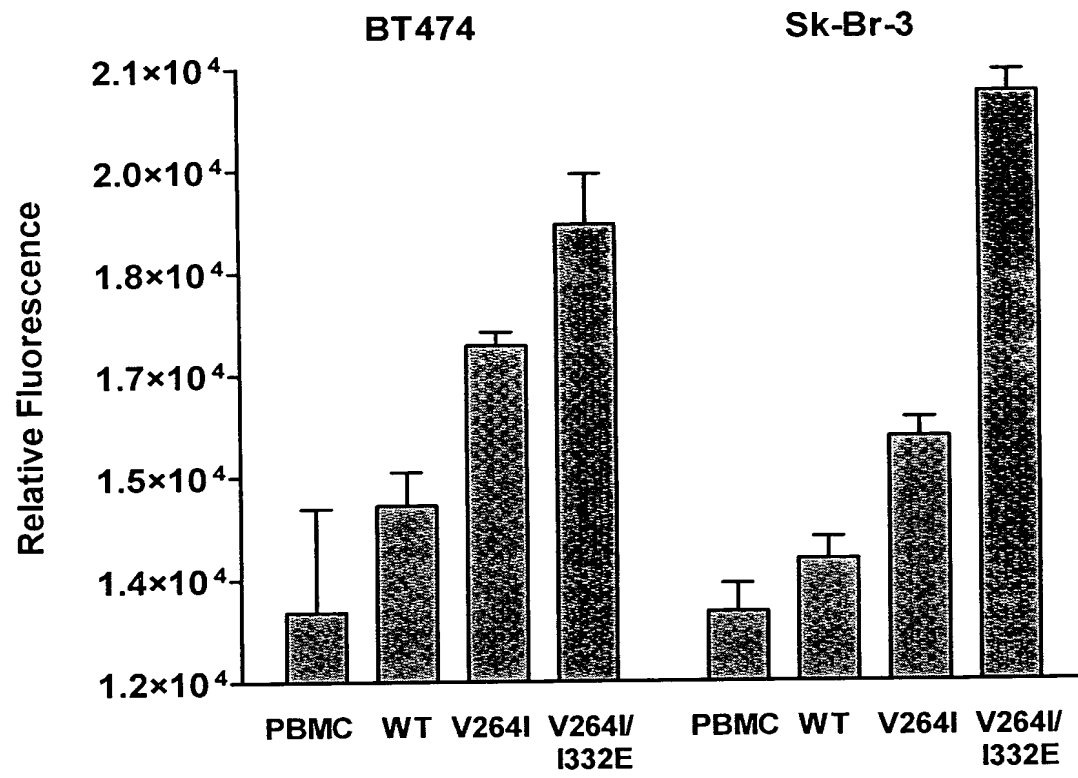


Figure 26b

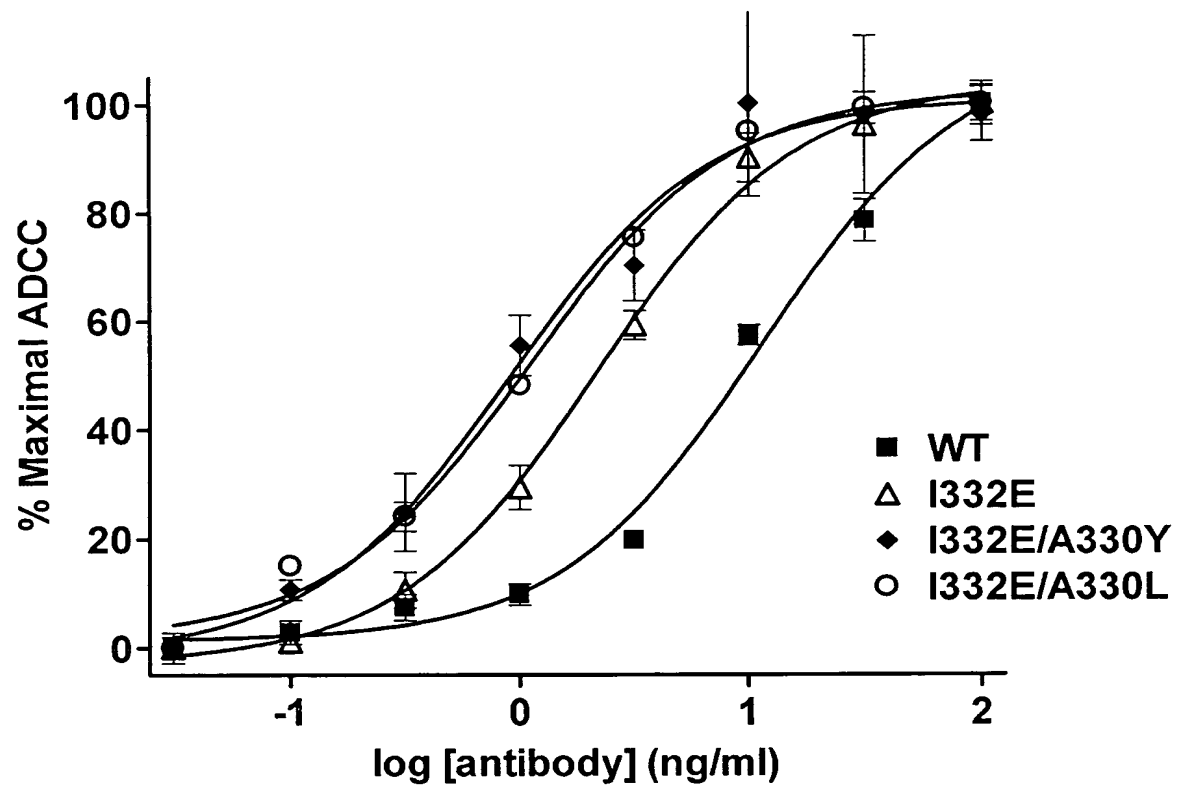


Figure 26c

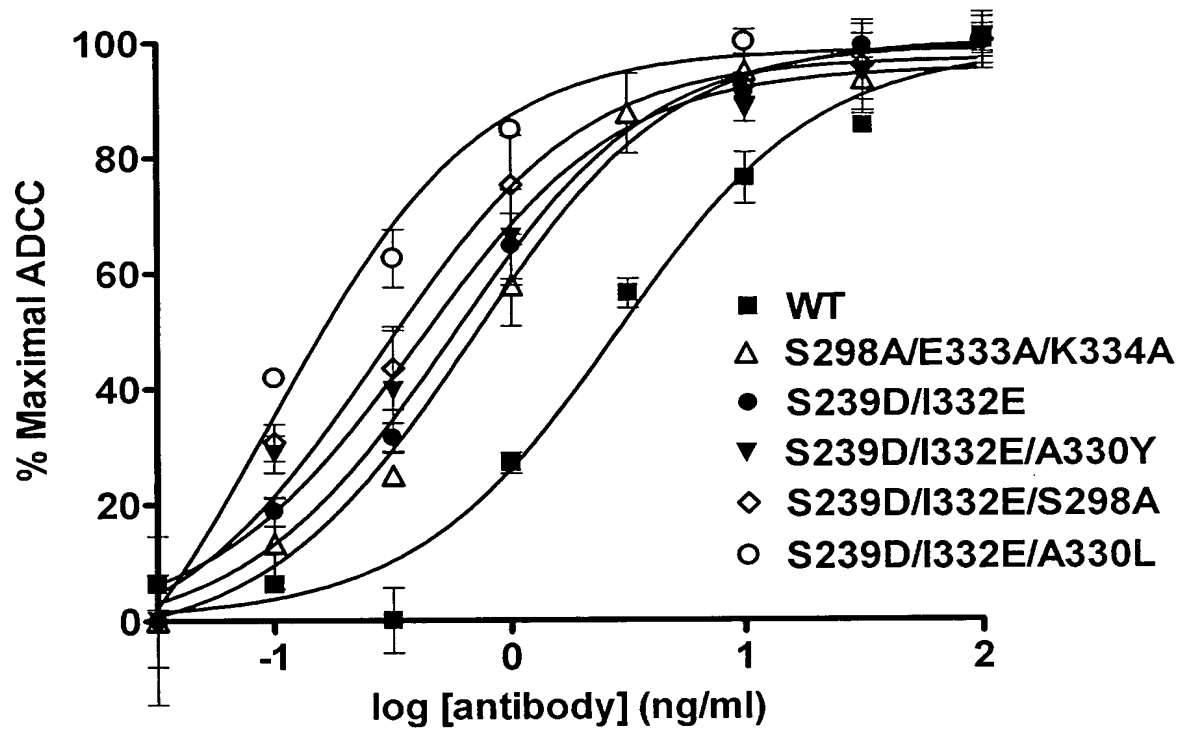


Figure 27a

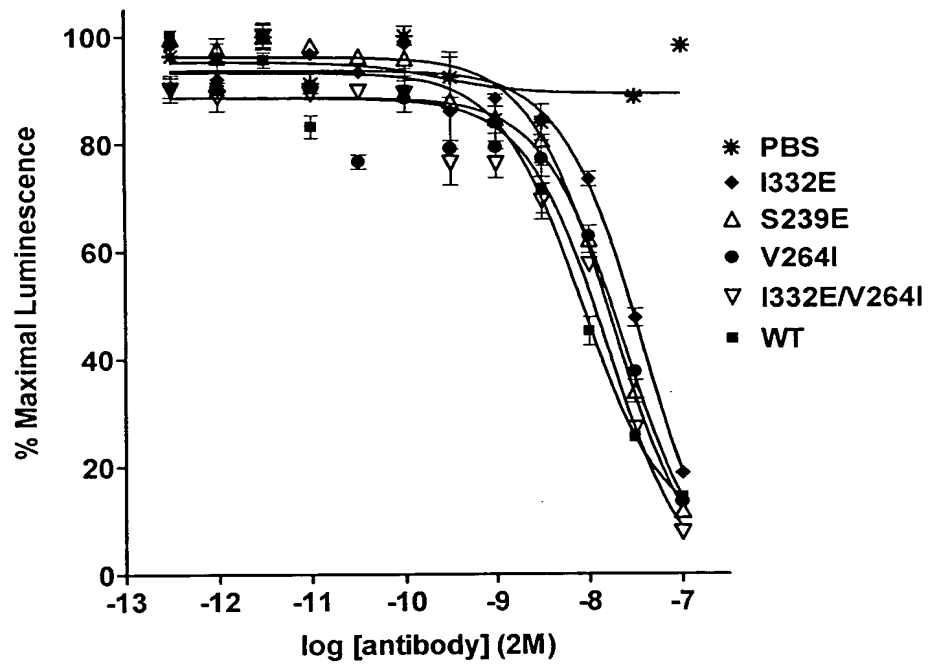


Figure 27b

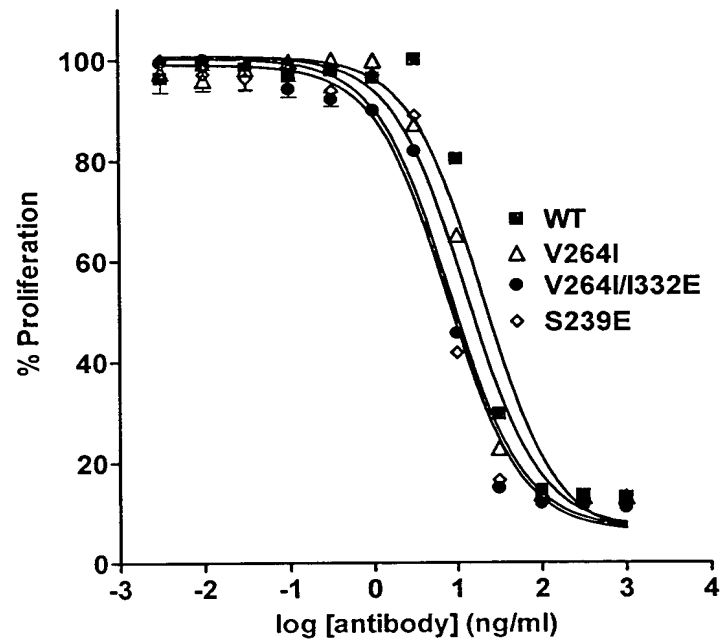


Figure 28

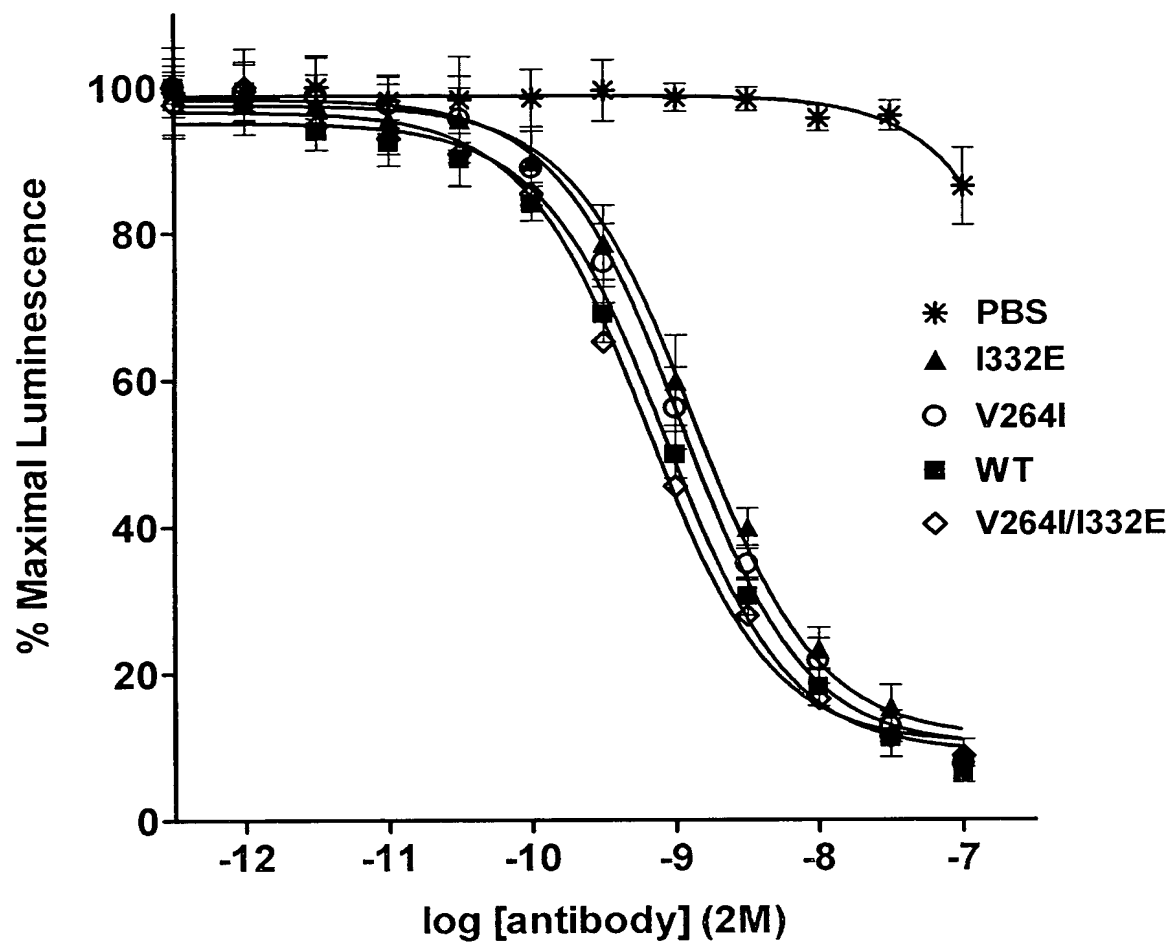


Figure 29

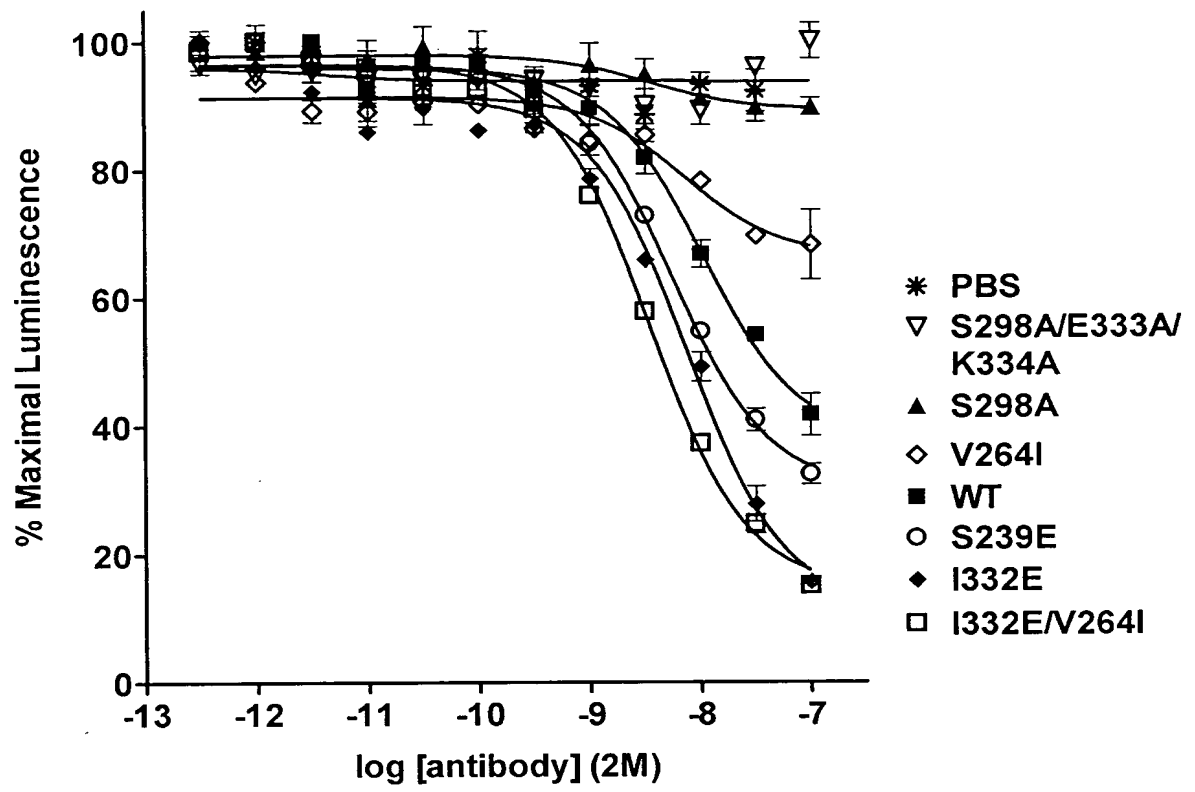


Figure 30

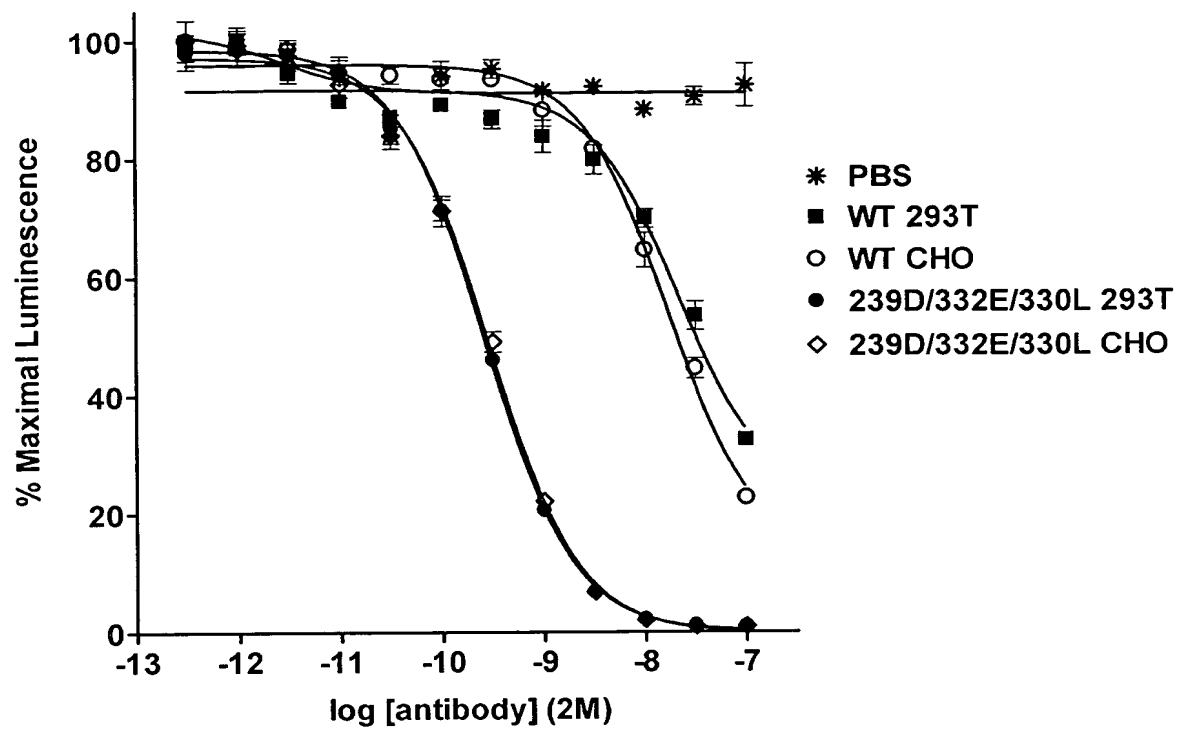


Figure 31a

Anti-CD20 light chain

QIVLSQSPAILSASPGEKVTMTCRASSSVSYIHWFQQKPGSSPKPWIYATSNLASGVPVRFSGSGSG
TSYSLTISRVEAEDAATYYCQQWTSNPPTFGGGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVCLL
NNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLS
SPVTKSFNRGEC

Figure 31b

Anti-CD20 heavy chain

QVQLQQPGAELVKPGASVKMSCKASGYTFTSYNMHWVKQTPGRGLEWIGAIYPGNGDTSYNQKFK
GKATLTADKSSSTAYMQLSSLTSEDSAVYYCARSTYYGGDWYFNVWGAGTTTVSAASTKGPSVFP
LAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLG
TQTYICNVNHKPSNTKVDKKAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV
VVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKA
LPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP
PVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

Figure 31c

Anti-CD20 heavy chain comprising possible Fc variants

QVQLQQPGAELVKPGAŠVKMSCKASGYTFTSYNMHWVKQTPGRGLEWIGAIYPGNGDTSYNQKFK
GKATLTADKSSSTAYMQLSSLTSEDSAVYYCARSTYYGGDWYFNVWGAGTTTVSAASTKGPSVFP
LAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLG
TQTYICNVNHKPSNTKVDKKAEPKSCDKTHTCPPCPAPELLGGPX₁X₂FLFPPKPKDTLMISRTPEVTC
VVX₃DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYX₄Z₁TYRVVSVLTVLHQDWLNGKEYKCKVSN
KALPX₅PX₆EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNY
KTPPVLDSDGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

Position	WT	Possible Substitutions
X ₁	S	D, E, N, Q, T
X ₂	V	I, M
X ₃	V	I, T, Y
X ₄	N	D
X ₅	A	Y, L, I
X ₆	I	D, E, N, Q
Z ₁	S	A